



STATE OF WISCONSIN
DEPARTMENT OF JUSTICE

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ATTORNEY GENERAL

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TO: Members, Assembly Committee on Criminal Justice

FR: Attorney General J.B. Van Hollen

DT: February, 4, 2010

RE: 2009 Assembly Bill 627

I write to you today to express my opposition to 2009 Assembly Bill 627, relating to admissibility of digitally produced photograph, film, motion picture, audio, or video and creating a penalty. This legislation would make inadmissible in criminal trials all digital representations captured by or at the direction of law enforcement, unless the digital representation has a watermark. It would make it a misdemeanor to offer into evidence any digital representation that is known to have been altered.

I believe this bill is unnecessary, jeopardizes the admissibility of legitimate evidence, may require the manipulation of original digital recordings or images, and could result in significant costs to the Department of Justice and other law enforcement agencies.

This legislation is unnecessary. The only possible rationale behind this bill is to protect against the state's alteration of evidence in a criminal trial. Not only is there no evidence to suggest the state is materially altering evidence to secure convictions, but there are already mechanisms in place to ensure the evidentiary reliability of photographs before they are put into evidence. Before a photograph (for example) can be admitted into evidence in a criminal trial, there must be a witness that testifies, under oath, that the image is a "fair and accurate" depiction or reproduction of what the witness purports it to be. So, for example, an officer might testify that a photograph accurately depicts how an offender's living room looked on the date a search warrant was executed and that the bag pictured on the coffee table containing a white powder is what he sent to the crime lab for analysis. A defendant might testify, again under oath, that a picture taken by a police officer of a vehicle is the car the defendant owns.

The bottom line is that for *any* media to be introduced into evidence in a criminal prosecution under current law, the state and the defendant would have to agree to its admission into evidence or there will be a witness, testifying under penalty of perjury, that the media fairly represents what it purports to represent and defense counsel would have an opportunity to raise

any recognized evidentiary objection. A witness is already committing a crime—potentially a felony—if he or she falsely testifies.

This legislation might prevent the introduction of digital media that are legitimately “altered.” Prosecutors and digital evidence practitioners routinely have to edit or otherwise enhance images. This has been done with film images for years. For example, a photograph’s brightness might be changed to better illuminate the scene. A photograph might be cropped to isolate a person in the crowd. Photos might be enlarged to show weapons, blood patterns, or a crime victim’s bruises that resulted from domestic violence. Recordings, too, need to be edited to delete irrelevant, immaterial, or prejudicial information. All of these standard practices could be prohibited if this bill were enacted.

This problem pertains not only to digital representations created by law enforcement, but Section 7 of the bill subjects *any* person to criminal liability for offering into evidence digital representations that are known to have been altered in the completely immaterial manner described above. Countless photos, videos, and recordings that are admissible today in civil cases could not be used because a party would fear criminal prosecution.

This legislation may ultimately require the manipulation of originals. Original digital representations do not have watermarks. Thus, the bill either is a wholesale prohibition on the admissibility of any digital representations (which is unlikely to be the intent of the authors) or is a command to require a watermark be added to digital representations. But by adding a watermark to the representation, the representation no longer exists in its original state. The very act of adding a watermark to an original digital representation appears to be the very manipulation of evidence the bill intends to prevent. By requiring alteration, this legislation invites a dispute over admissibility.

It is expensive to add watermarks. Law enforcement agencies across the state regularly use digital recording equipment for events such as criminal suspect interviews and crime scene photos. However, very few, if any, of the digital devices currently used by law enforcement agencies apply watermarks to the digital representations they are producing. To do so, the Department of Justice and local law enforcement agencies would have to purchase new equipment and/or watermark software and be trained on its proper use. It could cost each agency thousands of dollars – or more – to acquire watermark equipment and software for each type of media used. Additional maintenance and software subscription fees would occur annually.

The collateral consequences of inadmissibility may be severe. Photographs, digital recordings, and digital videos are often critical pieces of evidence in a prosecution. Where these materials do not have the watermarks contemplated by this bill – imagine statements caught on a cell phone, recorded before this bill would be enacted, or recorded before a law enforcement agency has the ability to expend the many thousands of dollars required by this mandate – prosecutions of guilty offenders will be jeopardized.

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Assembly Bill 627 appears based on a false assumption that law enforcement are likely to manipulate images to deceive a court to obtain convictions. There is no evidence for this. Moreover, existing evidentiary rules that safeguard trials and criminal laws preventing perjury are sufficient to guard against activity that amounts to fraud on the court.

The sweep of this bill, however, goes well beyond creating an additional mechanism to protect against a hypothetical malfeasance and prevents – and criminalizes – the introduction of evidence that is fully reliable. The result is increased costs to all law enforcement agencies and putting in jeopardy the successful prosecutions of numerous offenders, to say nothing of its impact on civil litigation.

I strongly urge you to reject this bill.

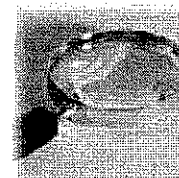


A POLICE CENTRAL WHITE PAPER



SUGGESTED PROCEDURES FOR PRESERVATION OF DIGITAL CRIME SCENE PHOTOGRAPHS

(authored on April 27, 1998)



1. Overview

There is considerable discussion in the Law Enforcement Community regarding admissibility issues involving photographs captured with digital cameras. These discussions are concerned with essentially four issues:

- A. No Film Negative--to testify to the original photograph.
- B. The Perceived Ability to Alter Photographic Evidence.
- C. The Lack of Clear Case Law Clarifying Admissibility.
- D. The Overall Quality of the Photographic Image.
- E. Storage, Retrieval & Management of Crime Scene Photographs

The purpose of this Police Central White Paper is to discuss these issues to aid Law Enforcement Officers as to the usability of Digital Cameras within their jurisdictions. It should be noted, that the author has significant experience with Digital Technology for over ten years and is a strong proponent of its use, especially in Law Enforcement applications.

The reader is strongly encouraged to discuss this issue with the appropriate District Attorney staff. Obviously, the DAs must be comfortable with this technology and be prepared to handle any potential challenges.

II. A Brief History of Digital Photography

The first cameras promoted as "digital" were introduced in the late 1980s. As an example, Sony Corporation introduced the "Mavica" series of cameras that captured and recorded an image on a "mini disk". This reusable disk held up to fifty pictures and could be immediately printed or stored on computer.

In reality, these "digital" cameras were in reality glorified video cameras equipped with electronic shutters and other features that improved video technology for still photography. Under proper conditions, and in the hands of a skilled photographer, these cameras produced surprisingly good photographs. But the inherent resolution of the pictures were limited by the basic video technology employed; and it was simply not possible to make an acceptable print larger than 4 x 6 or 5 x 7. Note that these cameras recorded a video "analog" signal on the disk (just like a VCR), thus the picture quality was further limited by this "composite

video" technology. In addition, the camera was just the first purchase--a special "player" that played out the video signal, a "frame grabber" board in the computer, and a video printer was necessary; thus escalating the price to at least \$20,000. Therefore, these early cameras had limited appeal and were used primarily in applications that had a clear need for immediate prints regardless of the costs involved.

In the early 1990s companies like Sony, Kodak, Canon and Nikon and others produced the first cameras that directly created a digital file. The digital format itself significantly improved photographic image quality. These images were typically stored on removable "PCMCIA Cards", better known as "Memory Cards" or "PC Cards". These digital photographic files could be read directly by the computer via inexpensive readers, thus eliminating the need for special video players.

At the same time, these companies began to develop CCD (Charged-Coupled Devices) sensors with better densities, hence higher resolution images. These cameras were also more familiar to the photographer and employed interchangeable lenses and other important features. Again, however, like any new technology, the costs were high, from \$15,000 to \$30,000 for the camera itself. Add the computer, digital camera and all of the other necessities and these solutions were to costly for the typical jurisdiction.

Today, there is a wide variety of digital cameras priced from \$400 to \$30,000. The inexpensive cameras are generally "point and shoot" cameras analogous to the old Brownie--thus devoid of the features that are required for effective crime scene documentation. Cameras under \$1000 will prove very acceptable for auto accidents or other "low level" crime scenes; but cameras in the \$2,000 to \$5,000 range will be required for more serious documentation. The \$20,000 to \$30,000 cameras are simply deemed to expensive for most crime scene or forensics units. Thus, for purposes of this paper, the focus will be on the mid-range cameras, priced between \$1,000 and \$5,000. Digital cameras in this price range will shoot high quality photographs that can be printed up to an 8 x 10 size.

Note, however, that price has no bearing upon the procedures that must be followed to minimize a challenge to admissibility. Good standard operating procedures will apply to all digital photography.

III. No Film Negative

Digital cameras use the CCD sensor to "capture" the photograph electronically. The camera then creates a digital file of this image that is recorded onto the storage media. This file is read into the computer, and an image is printed. Therefore, there is no film that exists with the "original" image of the photograph. Of course, the *real* issue is not the film; but has the photograph presented as evidence been altered.

Crime Scene Technicians, Forensic Specialists and District Attorneys have always been able to show a judge, jury and defense attorney a film negative (or polaroid) that is captured at the scene and processed chemically. Courts have traditionally held such evidence, along with

contemporaneous investigation notes as admissible. What can be more solid than film that came out of a camera? Any juror can understand this technology and have confidence in the unaltered state of the evidence. Clearly, this film, that can be held in your hand, is seemingly uncontestable. But is it?

We all remember the O. J. case. Late in the case some thirty photographs, purporting to show O. J. in the "shoes" were presented by the prosecution. These film-based photographs--there was not one digital--were taken at different times by different photographers. Yet all of these photographs were challenged and the innuendo of "altered evidence" was introduced by the defense! The lesson is clear--even film is contestable.

IV. The Perceived "Alterability" Issue

Film based photographs have been altered for years. Photographic "retouchers" can do just about anything to piece of film. Pick up a copy of the National Enquirer to see some examples.

And, in fact, with relatively inexpensive scanners and film recorders, negatives can be easily scanned into a computer, manipulated (altered?) and recorded onto 35mm film. Presto--a "new" manipulated (altered?) piece of film to show to the jury. Can this be done? Absolutely. Is it detectable? Certainly--but not to the average defense attorney, judge or jury.

In addition, film is not always secure. Recently, a small sheriff's office documented a homicide with 35mm film cameras. They always used the local discount store to develop and print the film. When the Investigator went to pick up the prints a day later (you know what is coming!), there was about ten people at the photo counter eagerly looking through the crime scene photographs. Great evidence security.

Digital, although filmless on the other hand, offers features that can actually aid the investigator and secure the evidence *if the proper procedures are followed!*

V. Case Law

Unfortunately, there is no clear case law, either Federal or State that directly addresses Digital Crime Scene Photographs. The Court have generally held, however, that photographic, video and audio evidence is admissible, providing documentary or testimonial supporting evidence is available. The fact that no direct case law is extant is not necessarily a negative as there are many digital cameras in use, and apparently there have been no serious challenges. Police Central, Inc. has commissioned a research project to periodically review case law changes involving this matter, and will publish results when necessary.

VI. Overall Picture Quality

As discussed, until the last couple of years, digital cameras could not take a picture that would compare in quality with film. Clearly, even with the

newest digital cameras, 35mm film still captures a photograph with more "image information". The question is, can digital cameras capture a picture of sufficient quality to document the crime scene. The answer is absolutely yes.

First, however, sound crime scene documentation methods must be used. Good methods include photographing the overall crime scene, perhaps from several locations. As with any camera, the photographer should then progressively take closer photographs of items of interest, with the last photos being macros or close-ups of detailed evidence. By following standard crime scene analysis techniques, digital cameras will produce 8 x 10 photographs that are almost indistinguishable from film based prints.

Second, the choice of a digital camera is critical. The reader is referred to another Police Central White Paper entitled "Considerations on Digital Cameras for Crime Scene Investigations", available on our Web Site at www.policecentral.com.

Third, the overall picture quality is greatly influenced by the digital printer. Because photographs are stored in the computer, many types of printers can be used. If the PC operates in a Windows environment, virtually any printer can be used to prepare the printed photograph--including monochrome or laser printers. To get true "photo" quality prints, many manufactures offer "Dye Sublimation" printers, or true silver halide printers with prices ranging from \$7,000 to \$13,000. These printers will produce photographic quality that can certainly be presented to a jury.

Finally, the world of digital offers the Crime Scene Technician certain tools that can be used to process the photograph. Some are similar to chemical adjustments that can be used on film to lighten or darken the image. But standard PC tools like Adobe Photoshop offer many enhancement capabilities that virtually not available with film and chemistry.

In summary, with the proper camera and printer, digital cameras will produce 8 x 10 photographs that most acceptable.

VII. Suggested System Capabilities and Procedures

This Police Central White Paper assumes that the user has selected a PC computer, digital camera and printer. How can these components work together to insure admissibility of the photographs.

First, it is important to note that the camera itself cannot alter an image that has been captured and stored on the PCMCIA card. Thus, the image stored on the PC card, by definition is in an original state.

Some cameras today can print images directly to their companion printer (i.e. the Fuji DS300 Digital Camera can print directly to the Fuji PG3000 color printer). If your camera/printer has this capability, we recommend that upon return to the Crime Scene Lab, the photos are immediately printed **and labeled** as "Original Camera Prints", along with the date, time and technician's initials. Later testimony can indicate that these

photographs were directly printed, *prior to any viewing on a computer system.*

Should your equipment not have this capability for direct printing, it is important to maintain the original file in an indelible format. Recordable CDs are just the answer.

We are all familiar with CD-ROMs. A file recorded on CD cannot be "re-recorded"; in other words, when a file is stored on CD it is indelible. Further, the PC will automatically record a date and time in the file format. Now it is true that the file could be read into a PC and enhanced (altered?), and the enhanced (altered?) photograph recorded back onto the same (or different) CD. If recorded on the same CD, however, it must carry a new filename--as the original file name is indelible. And, in any case, the file would carry a new date and time stamp. The following are suggested guidelines for secure processing of digital photographs:

1. Choose a digital camera that can output directly to a photo quality printer. Print and label original photos upon return to the crime scene lab. Have a form that testifies to this transaction.

2. Use a PC to record the digital files directly to a CD prior to viewing any image on the PC screen. Have a form that testifies to this transaction.

3. These forms should carry the following information as a minimum:

- a. Case Report Number, date and time of recording
- b. Number of Photographs
- c. ID Number of the CD-ROM
- e. Name and signature of photo technician
- f. The following Legend:

"This certifies that the digital photographs contained on CD Number ____ were recorded directly from the digital camera card prior to viewing on an computer system. The undersigned technician certifies that such digital photographs are thus identical to the digital photographs taken at the crime scene".

4. The digital files on the CD can then be safely viewed, enhanced, annotated and entered into a crime scene database. If the digital file is record from the PC card, directly onto an indelible CR-ROM, the original photographic file is always available. While it is true that the photograph can be read into the PC and manipulated, it cannot be recorded back on to the CD with the same file name. It must carry a new file name and corresponding date and time stamp from the computer.

If later challenged in court, the technicians testimony and

accompanying paperwork, in conjunction with the computer generated date and time stamps should present a strong audit trail to the court.

Police Central recommends that the above basic procedures be followed with digital photographic files. These standard Operating Procedures, published by the jurisdiction should be rigorously followed.

The MOST important aspect of this issue is, however, the credibility of the technician. Without a doubt, the strongest factor in admissibility is direct testimony reflecting the "true and accurate" nature of the photographs in question.

VIII. Nighttime Exposures and Special Lighting Photographs

Many crime scenes require photographic documentation at night. Using traditional film cameras, a "bulb" (open lens) setting can be selected for timed exposures. On most digital cameras, this setting is not available--the longest exposures being in the half-second range. However, many digital cameras have an effective ISO rating of 800; with some cameras having an ISO 3200 rating.

Even with these faster speeds, however, traditional "paint with light" techniques are impossible with digital. We recommend, therefore, the most powerful external flash units for long nighttime shots. Another alternative is to have a couple of "slave" flash units positioned in the crime scene. When the main flash is fired, the slaves will also flash, thus illuminating multiple points in the scene.

If special lighting, i.e. ultraviolet, will be important, the user is cautioned to fully test the camera for this application. We have found cameras that will shoot UV; some special cameras claim to shoot infrared. Many digital cameras have special lens coatings that effectively block UV and infrared, thus they are not useable in these applications. Best recommendation is to thoroughly test.

IX. Advantages of Digital Photography to the Crime Scene Investigator

1. Reduced Costs--a simple analysis of the direct amounts of money currently spent for film based photographs. Add up your costs for polaroids, 35mm film, developing and prints for court. In most jurisdictions, the investments in digital, including the PC, digital camera, printer, software and training will make strong financial sense.
2. Secure Chain of Evidence--all photographs will be maintained and printed by authorized law enforcement staff.
3. PC Time/Date Stamping of Digital Files--show an audit trail not available with film.
4. Indelibility of CD--secure, unalterable digital files.

5. Image Processing for clarity and annotation--images can be brightened, darkened, sharpened, and otherwise processed for clarity of detail.

6. Accessibility --Photographs can be placed on a secure computer network and made available to investigators, DAs, medical examiner, Defense Attorneys, or other appropriate parties.

7. Review of Photos at Crime Scene--most new digital cameras permit the Investigator the ability to review photographs on a display prior to leaving the crime scene. This assures the Investigator that all photographs are well exposed and show details desired. No more lost, ruined or poorly exposed photographs.

X. Summary and Recommendations

Digital technology is clearly a strong alternative to film-based photography for crime scene documentation. It is our opinion that digital is not subject to defense challenges any more than film--providing good Standard Operating Procedures are in place that assure proper evidence handling.

As with most technology today, the key is designing a system, incorporating the features that are importance, making sure that everything operates together, and integrating the system with proper procedures. Although many departments may have capable systems personnel, we strongly urge agencies to use commercial systems integration companies with Law Enforcement background to assist in developing these solutions.

XII. Disclaimer

Information presented in this White Paper represent the opinions of the author and Police Central, Inc. The Company believes the information presented is accurate as of the date of issue; however the Company disclaims and responsibility or liability for any information contained herein.

Police Central, Inc. is an Atlanta based supplier of Law Enforcement Imaging Software. Current uses of Police Central software include Crime Scene Photography, Crime Scene Image Database management, Mugshot Management, Warrant Tracking, Law Enforcement Staff Database and ID, Megan's Law Sex Offender Registration, and other related applications.

For further information, interested parties may contact Police Central at our headquarters at 6145 Barfield Road, Suite 127, Atlanta, GA 30328. Our telephone number is 1.678.904.1654. The author can be contacted at our website, jim@policecentral.com. Your comments, suggestions and criticisms are encouraged and accepted.

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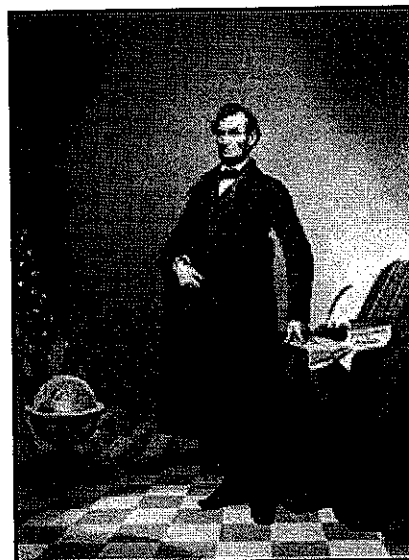
"Police Central, Inc.--Serving Law Enforcement with Technology...*that Works!*"

Photo Tampering Throughout History

Photography lost its innocence many years ago. In as early as the 1860s, photographs were already being manipulated, only a few decades after Niepce created the first photograph in 1814. With the advent of high-resolution digital cameras, powerful personal computers and sophisticated photo-editing software, the manipulation of digital images is becoming more common. Here, I have collected some examples of tampering throughout history.

To help contend with the implications of this tampering, we have developed a series of tools for detecting traces of tampering in digital images (contact me at Ma'at Consulting for more information about our services).

circa 1860: This nearly iconic portrait of U.S. President Abraham Lincoln is a composite of Lincoln's head and the Southern politician John Calhoun's body. Putting the date of this image into context, note that the first permanent photographic image was created in 1826 and the Eastman Dry Plate Company (later to become Eastman Kodak) was created in 1881.



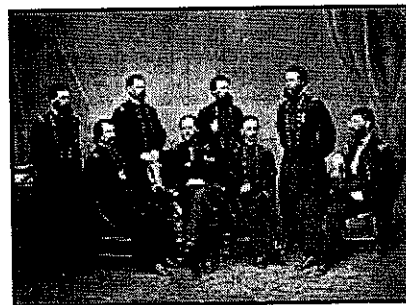
circa 1864: This print purports to be of General Ulysses S. Grant in front of his troops at City Point, Virginia, during the American Civil War. Some very nice detective work by researchers at the Library of Congress revealed that this print is a composite of three separate prints: (1) the head in this photo is taken from a portrait of Grant; (2) the horse and body are those of Major General Alexander M. McCook; and (3) the background is of Confederate prisoners captured at the battle of Fisher's Hill, VA.



Source: Library of Congress, Prints & Photographs Division

circa 1865: In this photo by famed photographer

Mathew Brady, General Sherman is seen posing with his Generals. General Francis P. Blair (far right) was added to the original photograph.



circa 1930: Stalin routinely air-brushed his enemies out of photographs. In this photograph a commissar was removed from the original photograph after falling out of favor with Stalin.



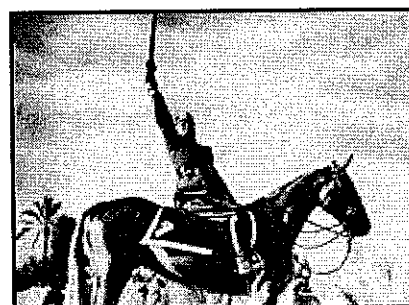
1936: In this doctored photograph, Mao Tse-tung (right) had Po Ku (left) removed from the original photograph, after Po Ku fell out of favor with Mao.



1937: In this doctored photograph, Adolf Hitler had Joseph Goebbels (second from the right) removed from the original photograph. It remains unclear why exactly Goebbels fell out of favor with Hitler.



1942: In order to create a more heroic portrait of himself, Benito Mussolini had the horse handler removed from the original photograph.



1950: It is believed that this doctored photograph contributed to Senator Millard Tydings' electoral defeat in 1950. The photo of Tydings (right) conversing with Earl Browder (left), a leader of the American Communist party, was meant to suggest that Tydings had communist sympathies.



1968: When in the summer of 1968 Fidel Castro (right) approves of the Soviet intervention in Czechoslovakia, Carlos Franqui (middle) cuts off relations with the regime and goes into exile in Italy. His image was removed from photographs. Franqui wrote about his feeling of being erased:



I discover my photographic death.
Do I exist?
I am a little black,
I am a little white,
I am a little shit,
On Fidel's vest.

May 1970: This Pulitzer Prize winning photo by John Filo shows Mary Ann Vecchio screaming as she kneels over the body of student Jeffrey Miller at Kent State University, where National Guardsmen had fired into a crowd of demonstrators, killing four and wounding nine. When this photo was published in *LIFE* Magazine, the fence post directly behind Vecchio was removed.



September 1971: The German Chancellor of West Germany, Willy Brandt (far left), meets with Leonid Brezhnev (far right), First Secretary of the Communist Party. The two smoke and drink, and it is reported that the atmosphere is cordial and that they are drunk. The German press publishes a photograph that shows the champagne bottles on the table. The Soviet press, however, removed the bottles from the original photograph.



September 1976: The so called "Gang of Four" were removed from this original photograph of a memorial ceremony for Mao Tse-Tung held at Tiananmen Square.



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Money-Saving Store Coupons Inside!

TV
GUIDE

Aug. 26 Sept. 1
1995

Oprah!
The
Richest
Woman
on TV?

How she
amassed
her \$250-
million
fortune

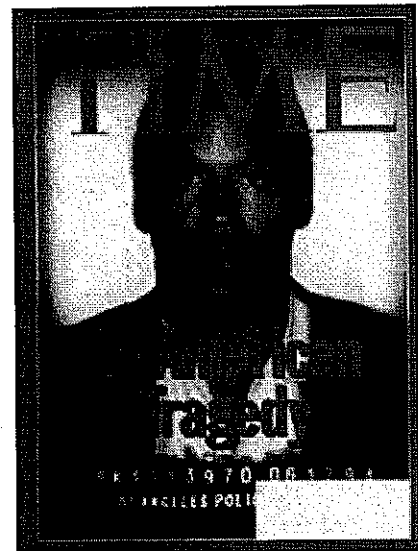
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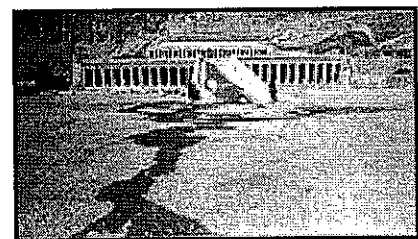
February 1994: This digital composite of Olympic ice skaters Tanya Harding and Nancy Kerrigan appeared on the cover of New York Newsday. The picture showed the rivals practicing together, shortly after an attack on Kerrigan by an associate of Harding's husband. The picture caption reads: "Tonya Harding, left, and Nancy Kerrigan, appear to skate together in this New York Newsday composite illustration. Tomorrow, they'll really take to the ice together."



June 1994: This digitally altered photograph of OJ Simpson appeared on the cover of Time magazine shortly after Simpson's arrest for murder. This photograph was manipulated from the original mug-shot that appeared, unaltered, on the cover of Newsweek. Time magazine was subsequently accused of manipulating the photograph to make Simpson appear "darker" and "menacing".



November 1997: After 58 tourists were killed in a terrorist attack at the temple of Hatshepsut in Luxor Egypt, the Swiss tabloid Blick digitally altered a puddle of water to appear as blood flowing from the temple.



December 1997: This digitally altered photograph of Kenny and Bobbi McCaughey appeared on the cover of Newsweek magazine shortly after Bobbi gave birth to septuplets. This photograph was manipulated from the original that appeared, unaltered, on the cover of Time magazine. Newsweek manipulated the photograph to make Bobbi's teeth straighter, and were accused of trying to make her "more attractive".



December 2000: The CBS emblem in this single frame of a live video broadcast, was digitally inserted during the new year's eve broadcast so as to conceal the NBC emblem that was on display in the background. The technology used in this case, is the same as that widely employed during the broadcast of sporting events to display advertisements on billboards.

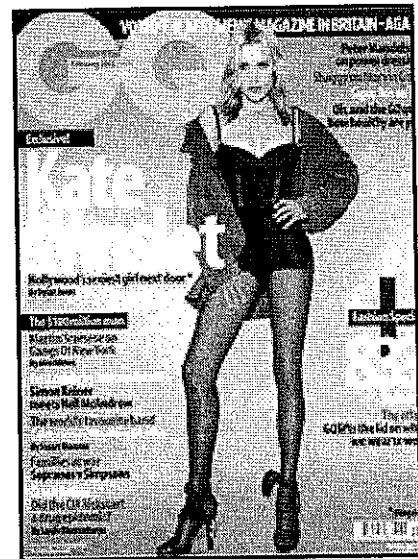


September 2000: Hoping to illustrate its diverse enrollment, the University of Wisconsin at Madison doctored a photograph on a brochure cover by digitally inserting a black student in a crowd of white football fans. The original photograph of white fans was taken in 1993. The additional black student, senior Diallo Shabazz, was taken in 1994. University officials said that they spent the summer looking for pictures that would show the school's diversity -- but had no luck.

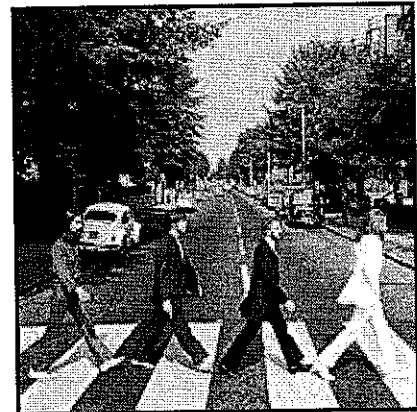


April 2002: The 1996 Child Pornography Prevention Act (CPPA) extended the existing federal criminal laws against child pornography to include certain types of "virtual porn". In 2002, hearing *Ashcroft v. Free Speech Coalition*, the United States Supreme Court found that portions of the CPPA, being overly broad and restrictive, violated First Amendment rights. The Court ruled that images containing an actual minor or portions of a minor are not protected, while computer-generated images depicting a fictitious minor are constitutionally protected.

January 2003: This cover of *GQ* magazine featured a digitally slimmed actress Kate Winslet. Winslet said that the retouching was "excessive." "I don't look like that and more importantly I don't desire to look like that. I can tell you that they've reduced the size of my legs by about a third", said Winslet.



January 2003: The original copy of the Beatles Abbey Road album cover shows Paul McCartney, third in line, holding a cigarette. United States poster companies have airbrushed this image to remove the cigarette from McCartney's hand. This change was made without the permission of either McCartney or Apple Records, which owns the rights to the image. "We have never agreed to anything like this," said an Apple spokesman. "It seems these poster companies got a little carried away. They shouldn't have done what they have, but there isn't much we can do about it now."



July 2003: This Redbook cover of actress Julia Roberts is a composite of Roberts' head taken at the 2002 People's Choice award, and her body taken at the Notting Hill movie premiere several years earlier. Publisher Hearst admits its mistake: "In an effort to make a cover that would pop on the newsstand, we combined two different shots of Julia Roberts. We acknowledge that we may have gone too far and hope that Ms. Roberts will accept our apology."

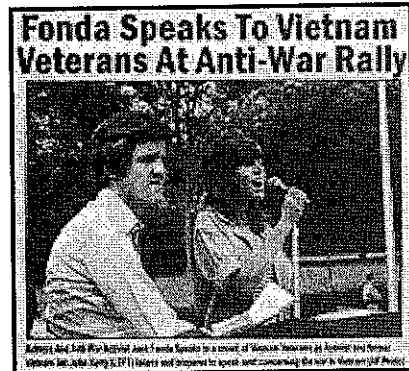


April 2003: This digital composite of a British soldier in Basra, gesturing to Iraqi civilians urging them to seek cover, appeared on the front page of

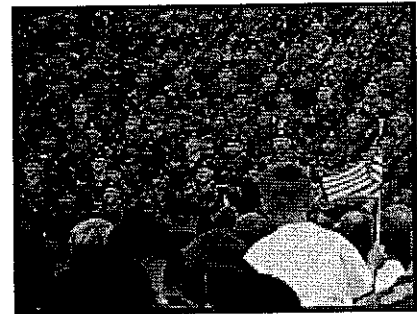
the Los Angeles Times shortly after the U.S. led invasion of Iraq. Brian Walski, a staff photographer for the Los Angeles Times and a 30-year veteran of the news business, was fired after his editors discovered that he had combined two of his photographs to "improve" the composition.



February 2004: This digital composite of Senator John Kerry and Jane Fonda sharing a stage at an anti-war rally emerged during the 2004 Presidential primaries as Senator Kerry was campaigning for the Democratic nomination. The picture of Senator Kerry was captured by photographer Ken Light as Kerry was preparing to give a speech at the Register for Peace Rally held in Mineola, New York, in June 1971. The picture of Jane Fonda was captured by Owen Franken as Fonda was speaking at a political rally in Miami Beach, Florida, in August 1972.



March 2004: This political ad for George W. Bush, as he was running for President, shows a sea of soldiers as a back drop to a child holding a flag. This image was digitally doctored by copying and pasting, from this original photograph, several soldiers to digitally remove Bush from a podium. After acknowledging that the photo had been doctored, the Bush campaign said that the ad would be re-edited and re-shipped to TV stations.

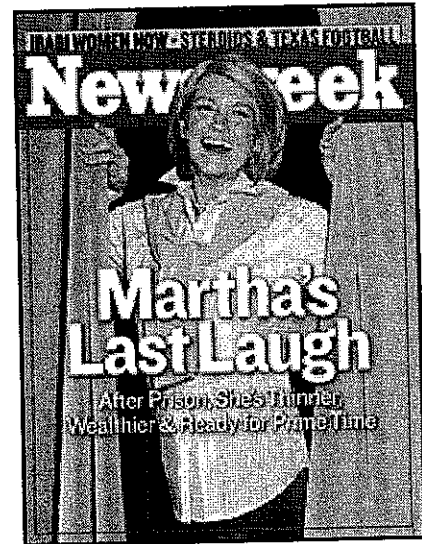


April 2004: This image, which was widely circulated on the Internet, shows a U.S. Marine posing for a photo with two Iraqi children while holding a sign reading "Lcpl Boudreaux killed my Dad then he knocked up my sister". Boudreaux claims that this image was tampered with from the original, in which the sign read "Welcome Marines". A military investigation into potential wrong-doing was inconclusive. It remains unclear if this image is authentic.

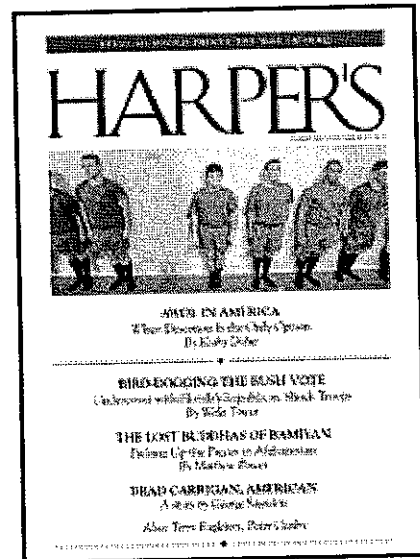


March 2005: This digital composite of Martha Stewart's head on a model's body appeared on the cover of Newsweek as Stewart was emerging from prison "thinner, wealthier and ready for prime

time", as the headline reads. Newsweek disclosed the source of the cover image on Page 3 with the lines: "Cover: Photo illustration by Michael Elins ... head shot by Marc Bryan-Brown."



March 2005: This Harper's cover, taken at Parris Island, S.C., shows seven Marines lined up in their T-shirts, shorts and socks. The picture accompanied a story about soldiers that go AWOL (absent without leave). The soldiers depicted in the picture, however, were not AWOL. The picture was supplied by Getty Images as a stock photograph. "We are decorating pages," said Giulia Melucci, the magazine's vice president for public relations. "We are not saying the soldiers are AWOL. Our covers are not necessarily representative."



April 2005: An article in the journal Nature reports on the impact of digital photography and image-manipulation software in science. For example, Mike Rossner, editor of the Journal of Cell Biology, estimates that roughly 20% of accepted manuscripts to his journal contain at least one figure that has to be remade because of inappropriate image manipulation. And, in 1990, 2.5% of allegations examined by the U.S. Office of Research Integrity, which monitors scientific misconduct, involved contested scientific images. By 2001, this figure was nearly 26%.

April 2005: In this doctored photograph, British politicians Ed Matts, conservative candidate for Dorset South, and Ann Widdecombe, conservative candidate for Maidstone and the Weald, are shown holding a pair of signs that together read "controlled immigration -- not chaos and inhumanity". This picture appeared as part of

Matts' election literature. The original photograph, however, shows the same two candidates campaigning for a Malawian family of asylum seekers to be allowed to stay in Britain. Widdecombe said she was "happy to be associated with either message".



April 2005: This digital composite of actors Brad Pitt and Angelina Jolie, rumored to have a romantic relationship, appeared on the cover of Star Magazine. The picture of Pitt was taken in Anguilla, a Caribbean island, in January 2005. The picture of Jolie was taken in Virginia some time in 2004. On page 8 is a disclaimer noting the image is a "composite of two photographs."



June 2005: This picture from the Harvard College viewbook features a doctored version of the Harvard's newspaper March 9, 2005 front page. The headline in the original front page, reading "Summers To Face No Confidence Vote", was replaced with an illegible block of text. A Harvard spokesman confirmed that someone involved with the production of the viewbook had decided to remove the headline -- "It's a mistake, and it should not have happened", he said.

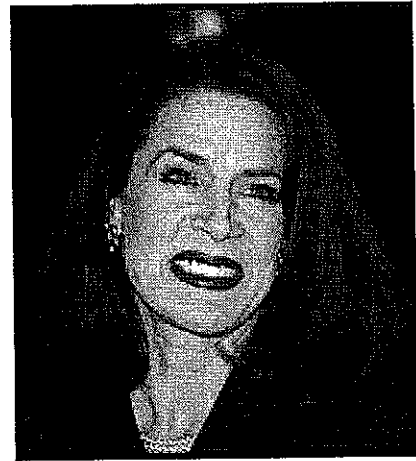


July 2005: This digital composite appeared on a campaign flyer for New York City Democratic mayoral candidate Virginia Fields. The picture shows Fields standing with a diverse group of people. Fields' chief campaign consultant, Joe Mercurio, admitted the picture was a composite of four separate photos. The picture, according to Mercurio, was meant to show that she has broad support and was not intended to deceive anyone.



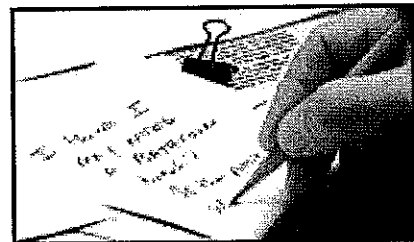
August 2005: Florida Congresswoman Katherine

Harris, who is running for a U.S. Senate seat next year, has accused some newspapers of doctoring photos to distort her makeup as a way to poke fun at her. Harris became famous when she oversaw the Florida recount in the 2000 presidential election, that gave George W. Bush a 537-vote victory in Florida. "I'm actually very sensitive about those things, and it's personally painful," she said. "But they're outrageously false. ... Whenever they made fun of my makeup, it was because the newspapers colorized my photograph." Harris and her staff have not, however, been able to cite a specific example of an altered photo. The photo of Harris, shown here, is not known to have been doctored.



August 2005: A magistrate in Sydney, Australia threw out a speeding case after the police said it had no evidence that an image from an automatic speed camera had not been doctored. This case revolved around the integrity of MD5, a digital signature algorithm, intended to prove that pictures have not been doctored after their recording. It is believed that this ruling may allow any driver caught by a speed camera to mount the same defense.

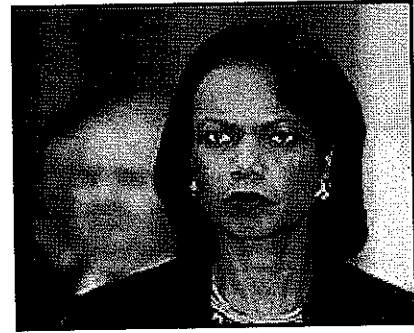
September 2005: This photo, taken of U.S. President George W. Bush as he sat in a meeting of the United Nations Security Council, shows Bush scribbling a note to Secretary of State Condoleezza Rice reading, "I think I may need a bathroom break. Is this possible?" Reuters' picture editor, Gary Hershorn, explained that sections of the photo were overexposed so a Reuters' processor used the Photoshop technique to "burn down the note." Hershorn says that the photo was not manipulated in any way, but that it was standard practice for such news photos to be enhanced.



October 2005: In August of 2005, the actor Tom Sizemore was convicted on charges of domestic violence, criminal threats, vandalism, and making obscene and harassing phone calls. In appealing this decision, Sizemore's lawyers contend that pictures showing the victim, Heidi Fleiss, with injuries, were faked. Los Angeles Superior Court Judge Antonio Barreto Jr. has given prosecutors 30 days to prove the photos were not doctored, or produce the person who took the photographs.

October 2005: This doctored photo of Secretary

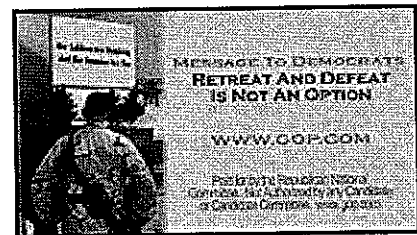
of State Condoleezza Rice appeared alongside a USA Today news story about Rice's comments to U.S. Lawmakers regarding U.S. Troops in Iraq. After receiving complaints from readers, this photograph was removed from USA Today's website, and the following Editor's note appeared alongside a "properly adjusted copy": *Photos published online are routinely cropped for size and adjusted for brightness and sharpness to optimize their appearance. In this case, after sharpening the photo for clarity, the editor brightened a portion of Rice's face, giving her eyes an unnatural appearance. This resulted in a distortion of the original not in keeping with our editorial standards.*



November 2005: This digitally altered image of illustrator Clement Hurd appeared in a newly revised edition of the book "Goodnight Moon", a classic children's book written by Margaret Wise Brown and illustrated by Hurd. The publisher, HarperCollins, altered the original photograph to remove a cigarette from Hurd's hand. HarperCollins said it made the change to avoid the appearance of encouraging smoking and did so with the permission of the illustrator's estate. But Mr. Hurd's son said he felt pressured to allow it. Prior to this latest edition, the photograph of Mr. Hurd grasping a cigarette has been on the book for at least two decades.



December 2005: A political video produced by the Republican National Committee (RNC) depicts a U.S. soldier watching a television where Democratic leaders are speaking critically of the Bush administration's handling of the war in Iraq. The final screen shot, shown to the right, reads "Our soldiers are watching and our enemies are too." As shown in this original frame, this video was digitally altered -- the soldier was watching the movie How the Grinch Stole Christmas.



January 2006: In 2004, Professor Hwang Woo-Suk and colleagues published what appeared to be ground-breaking advances in stem cell research. This paper

appeared in one of the most prestigious scientific journals, *Science*. Evidence slowly emerged that these results were manipulated and/or fabricated. After months of controversy, Hwang retracted the *Science* paper and resigned his position at the University. An independent Korean panel investigating the accusations of fraud found, in part, that at least nine of the eleven customized stem cell colonies that Hwang had claimed to have made were fakes. Much of the evidence for those nine colonies, the panel said, involved doctored photographs of two other, authentic, colonies.

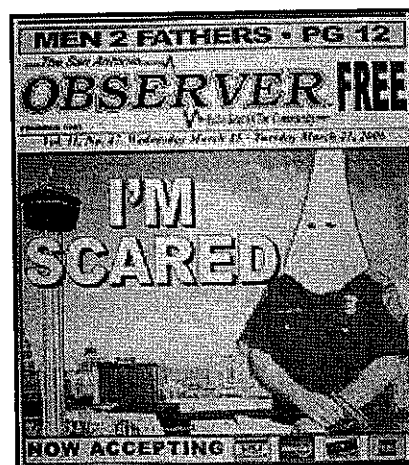
January 2006: In 2001, Dr. Jon Sudbo of the Norwegian Radium Hospital in Oslo published a study, in the prestigious journal *Lancet*, contending that long-term use of certain non-steroidal anti-inflammatory drugs reduced the risk of oral cancer. This finding was touted as a way to shift the focus of treatment away from surgery and toward new drug therapies. These results were cast into doubt when it was revealed that 250 of Sudbo's sample of 908 people in that study all shared the same birthday. In addition, it was revealed that two photographs from a microscope, reportedly representing two different patients at different stages of precancerous mouth lesions, were different magnifications of the same image. The editors of *Lancet* issued an "expression of concern" saying Sudbo's research was "just complete fabrication."

January 2006: Famed Indian movie star Khushboo is taking legal action against the publishers of Maxim magazine for the publication of a doctored photograph. The photograph was created by digitally splicing Khushboo's head onto another model's scantily clad body. This photograph was published in the Indian version of Maxim under the heading "Women you will never see in Maxim - 100% fake". Magazine editor, Sunil Mehra, said "We are deeply apologetic for causing any inadvertent hurt and offence to Khushboo. Despite an apology, Khushboo plans to go to court, "Indeed the punishment that is finally meted out to them should be a deterrent against anyone who tries to treat women as a commodity and exploit them as they please. I will not opt for

any kind of out-of-court settlement," she said.

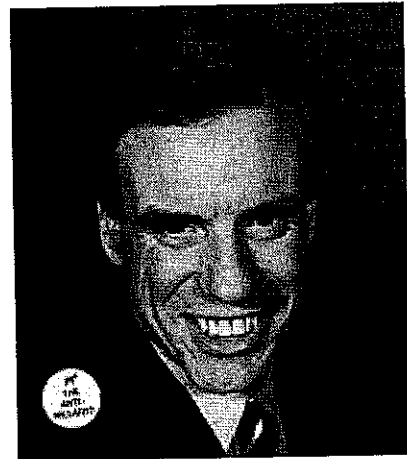


March 2006: This cover of the San Antonio Observer features a San Antonio police officer wearing a white hood of the Ku Klux Klan. The newspaper admits that they digitally inserted the hood and gun into the original photograph. Police spokesman Joe Rios said that the Observer defamed the character of the officer in the photograph. "You can clearly read his badge number," Rios said. "I can tell you that the officer who was depicted in that picture is very upset." Ida Brown, an Observer spokeswoman, disputed that the officer's badge number could be discerned on the cover and said the image was not intended as a personal attack. "Primarily, the picture shows that there are racist police officers on the force, and they do target minorities who are innocent," Brown said.



March 2006: This March 12th cover of the New York Times Magazine shows former Virginia Governor Mark Warner, a possible contender in the 2008 U.S. presidential race. After receiving complaints from Warner's campaign about the accuracy of this photo, the New York Times published the following correction. "The cover photograph in The Times Magazine on Sunday rendered colors incorrectly for the jacket, shirt and

tie worn by Mark Warner, the former Virginia governor who is a possible candidate for the presidency. The jacket was charcoal, not maroon; the shirt was light blue, not pink; the tie was dark blue with stripes, not maroon. The Times's policy rules out alteration of photographs that depict actual news scenes and, even in a contrived illustration, requires acknowledgment in a credit. In this case, the film that was used can cause colors to shift, and the processing altered them further; the change escaped notice because of a misunderstanding by the editors."



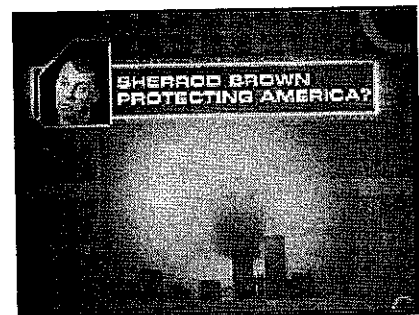
April 2006: New Orleans Mayoral Candidate Kimberly Williamson Butler digitally inserted herself into this photograph of what appeared to be the French Quarter in New Orleans. The setting, however, was the New Orleans Square at Disneyland. This photo was then manipulated again to remove a Disneyland trash can from the background.



June 2006: This photograph, showing two police officers standing by as prostitutes in Cuba hail a foreign tourist, appeared in the El Nuevo Herald under the headline "Hookers: The Sad Meat of the American Dollar". This image, however, was a composite of two separate photographs taken by veteran photographer Roberto Koltun, and published over his objections. "Two things were put together," commented photo coordinator Orlando Mellado. "Asked why the photograph was published, Mellado responded "that's a decision that was made by another editor."

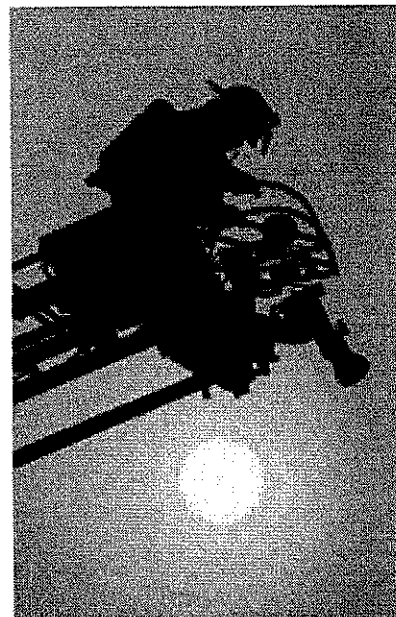


July 2006: This controversial ad appeared as part of the Ohio Senate campaign between incumbent Mike DeWine (R) and challenger Sherrod Brown (D). DeWine's campaign created a video of the World Trade Center in flames to attack Brown as soft on terrorism. The ad shows the south tower burning -- the north tower was hit first, however, so the south tower could not be burning without the north tower burning as well. A DeWine spokesman acknowledged the image was a "graphic representation" by the firm that produced

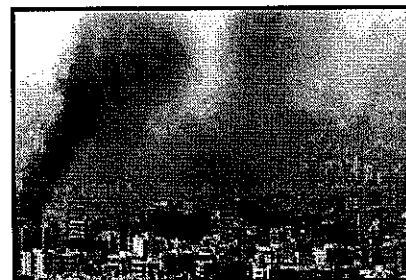


the ad, which used a still photo of the towers with computer-generated smoke added.

July 2006: The Charlotte Observer fired Patrick Schneider, a staff photographer, for altering this image of a fire fighter. Following the incident, the paper released the following statement: "Photographer Patrick Schneider's photo depicted a Charlotte firefighter on a ladder, silhouetted by the light of the early morning sun. In the original photo, the sky in the photo was brownish-gray. Enhanced with photo-editing software, the sky became a deep red and the sun took on a more distinct halo. The Observer's photo policy states: No colors will be altered from the original scene photographed." Schneider said that he only meant to restore the actual color of the sky that was lost when he underexposed the photo. Schneider was suspended in an earlier episode after it was revealed that his award-winning photographs had been manipulated. Schneider allowed this case to be used to educate other professional photographers in ethics seminars. At the time he pledged, "I will no longer tone my background down that far."

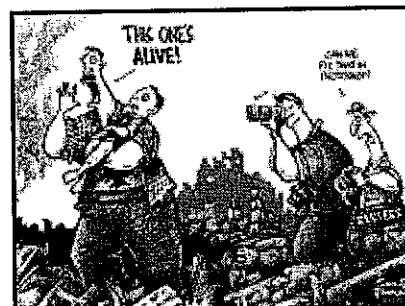
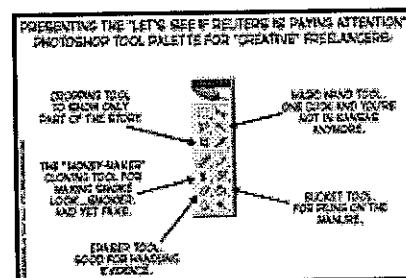


August 2006: This photograph by Adnan Hajj, a Lebanese photographer, showed thick black smoke rising above buildings in the Lebanese capital after an Israeli air raid. The Reuters news agency initially published this photograph on their web site and then withdrew it when it became evident that the original image had been manipulated to show more and darker smoke. "Hajj has denied deliberately attempting to manipulate the image, saying that he was trying to remove dust marks and that he made mistakes due to the bad lighting conditions he was working under", said Moira Whittle, the head of public relations for Reuters. "This represents a serious breach of Reuters' standards and we shall not be accepting or using pictures taken by him." A second photograph by Hajj was also determined to have been doctored.



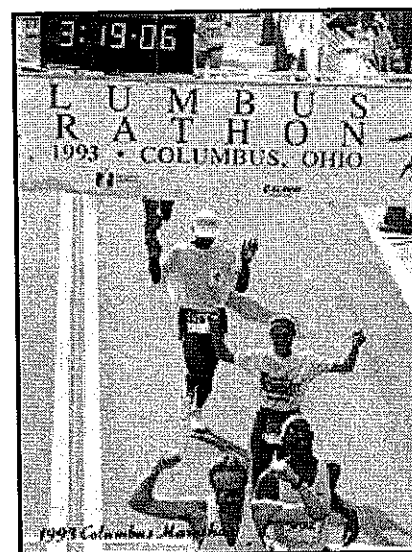
August 2006: The Reuters news agency published a photograph showing the remnants of

an Israeli bombing of a Lebanese town. In the week that followed, hundreds of bloggers and nearly every major news organization reported that the photograph had been doctored (see above entry). These political cartoons reflected the general consensus of outrage and anger.



August 2006: An Easton, Middlesbrough (UK) man, Stafford Sven Tudor-Miles, scanned photographs of adult porn stars into his computer and digitally altered them so that the women appeared to be of girls under the age of 18. The 38-year-old fine art student was charged with possessing indecent pseudo-images of children. His barrister argued that the pictures were of adults and, therefore, no offense had been committed. Under the Protection of Children Act 1978, as amended by the Criminal Justice and Public Order Act 1994, a pseudophotograph of a child is defined as an image, whether made by computer graphics or otherwise, which appears to be that of a child. Possession or creation of such an image is, therefore, illegal. Tudor-Miles pleaded guilty to five counts of attempting to make indecent pseudo-photographs of children, one charge of possessing indecent pseudo-photographs and one of breaching a sex offenders order. Tudor-Miles will be sentenced on September 8.

August 2006: Nathan Noy, a rival of Rep. Jean Schmidt (R-Ohio), contends that this picture on Schmidt's webpage showing her at a 1993 Marathon has been doctored. The photo shows Schmidt near the finish line with the time clock showing 3:19:06. But a newspaper list does not include Schmidt's name. Joseph Braun, an attorney representing Schmidt, denied that the photograph is fake. He produced what he said was an official race results book, listing Schmidt as the fifth-place finisher in her age group with a time of 3:19:09. A four-member commission panel ruled that there was enough evidence to look into the complaint. **UPDATE:** Citing the lack of evidence or

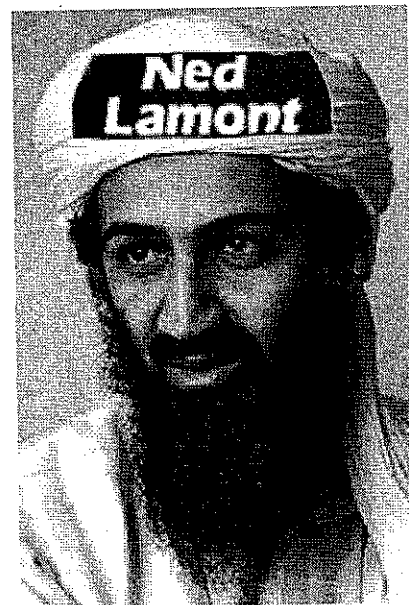


witnesses, a unanimous Ohio Elections Commission dismissed the campaign complaint against Schmidt. After the hearing, Noy admitted he made a mistake pursuing the complaint.

September 2006: A photograph of CBS news anchor Katie Couric was digitally altered from this original to give Couric a trimmer waistline and a thinner face. This photo appeared in CBS' in-house magazine Watch! CBS spokesman, Gil Schwartz, said the doctored image was the work of a CBS photo department employee who got a little zealous". Schwartz added, "I talked to my photo department; we had a discussion about it; I think photo understands this is not something we'd do in the future."



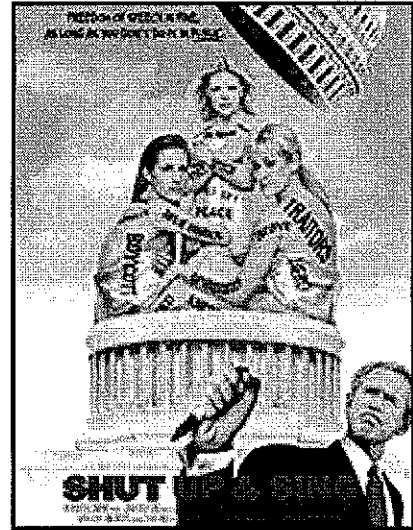
September 2006: This image was posted on no-to-ned.blogspot.com, a website supporting Senate Democrat Joseph Lieberman. In reference to Lieberman's opponent, the accompanying caption read "Four out of Five Terrorists Agree Ted Lamont for Senate". "As soon as we saw it, we immediately pulled it down," Lieberman campaign spokeswoman Tammy Sun said. "We condemn things like this. It has no place in our political discourse or on our web site."



September 2006: The Dubliner apologized for a story depicting the wife of famed golfer Tiger Woods in doctored pornographic images. The article read, in part, "Most American golfers are married to women who cannot keep their clothes on in public. Is it too much to ask that they leave them at home for the Ryder Cup? Consider the evidence - Tiger Woods' wife Elin Nordegren can be found in a variety of sweaty poses on porn sites across the Web.". After Woods publicly denounced the story, the magazine apologized: "The publisher and staff acknowledge that the satirical article was inappropriate. We wish to

sincerely apologise to Tiger Woods, his wife Elin Nordegren and other Ryder Cup players and their families for any offence they may have taken to it. The article was written as a satirical piece and, in the context of the entire article, the publishers believed the readers would not be left with the impression that there was any truth in the assertions, it being an absurd parody of inaccurate tabloid publishing generally. If any contrary impression was given it certainly was not intended and for this the publishers unreservedly apologise"

October 2006: This movie poster for *Shut Up and Sing* (a film about the criticism of the musical group Dixie Chicks that followed lead singer Natalie Maines' comments about being ashamed that President Bush was from her home state of Texas) was doctored from its original. In this doctored version, sheets were added to the members so as to be less revealing.



October 2006: An Ohio Republican Party news release attacked Democratic Rep. Sherrod Brown for enlisting the support of comedian Al Franken. The news release was accompanied by a photograph, showing Franken dressed up like a baby bunny, wearing adult diapers and clutching a fluffy white teddy bear. Andy Barr, director of Franken's Midwest Values PAC, confirmed, "The picture is a fake." The Ohio Republican Party used a 2004 photo of Franken for the doctored image.



UPDATE (July 2009): Shortly after Senator Al Franken was seated in the U.S. Senate, *Cincinnati Enquirer* columnist Peter Bronson re-published this doctored photo under the heading "Is this who you want making decisions about your health care?" In his retraction, Bronson wrote "Last week I posted a blog about comedian Al Franken joining the Senate, including a picture of Franken wearing bunny ears and a diaper. Franken did many things on Saturday Night Live that could be embarrassing to a Senator. But apparently, that was not one of them. It turns out the picture was photoshopped. We don't knowingly run false pictures, so I took it down and replaced it with another goofy picture of Sen. Franken."

November 2006: This photo of ABC News' Elizabeth Vargas breastfeeding her baby while at her anchor desk accompanied an article with Vargas about balancing work and motherhood. The image was created by digitally combining a head shot of Vargas with another image. The article is scheduled to appear in next month's issue of Marie Claire Magazine. A spokesperson for the magazine called Vargas "a great journalist," and added that "We do not believe anyone seriously thought she would nurse and report the news at the same time!"



February 2007: The campaign of Tung Nguyen (second from left) for Orange County supervisorial candidate doctored a photo placing Nguyen close to Governor Schwarzenegger. The photo appeared in two Vietnamese-language daily newspapers. Although Nguyen attended the event with Schwarzenegger, he was not standing next to him. Instead, Nguyen's head was spliced onto another person's body. Nguyen's campaign first blamed the alteration on an advertising company and then on a campaign volunteer.

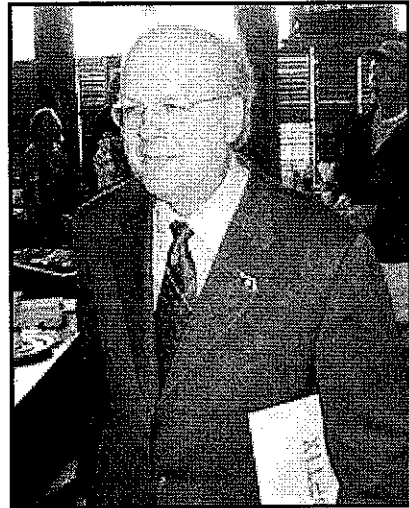


March 2007: This image of former U.S. President Ronald Reagan appeared on the cover of Time magazine under the headline "How the Right Went Wrong". The image was doctored to include a tear on Reagan's face. Time issued a statement saying it regularly runs what it calls "conceptual covers." They said: "This week's cover image is clearly credited on the table of contents page, naming both the photographer of the Reagan photo and the illustrator of the tear."

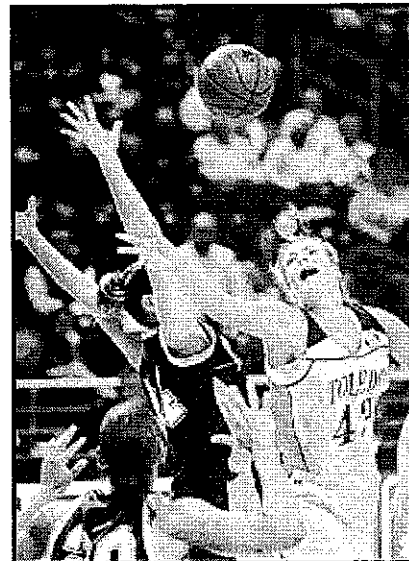


April 2007: Under the headline "Rove personally connected to email scandal", this photo of presidential adviser Karl Rove, was said to provide evidence that the White House had created an independent e-mail system for communicating

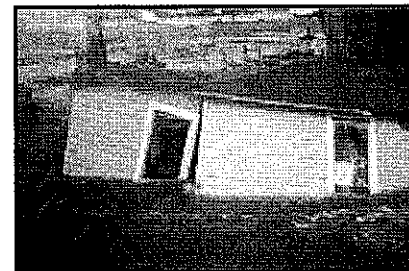
outside of the White House's email system, which is automatically archived for record-keeping. The doctored photo, however, was part of an April Fool's joke, and marketing campaign by the Internet design company Coptix. "We watched the misinformation filter upward and outward," said a Coptix spokesman. "This has driven tens of thousands of visitors to our Web site. ... We consider our Web marketing experiment a success."



April 2007: Newspaper photographer Allan Detrich resigned from *The Blade* of Toledo Ohio after admitting he had altered a photo that appeared in the paper. Detrich submitted at least 79 photos for publication since the beginning of the year that were digitally altered, 58 of which appeared in print. In a printed letter to readers, Blade Editor Ron Royhab said "the changes Mr. Detrich made included erasing people, tree limbs, utility poles, electrical wires, electrical outlets, and other background elements from photographs. In other cases, he added elements such as tree branches and shrubbery." The Blade released three examples of how Detrich altered photos. "Readers have asked us why this was such a big deal. What's wrong with changing the content of a photograph that is published in a newspaper? The answer is simple: It is dishonest," Royhab wrote. "Journalism, whether by using words or pictures, must be an accurate representation of the truth."

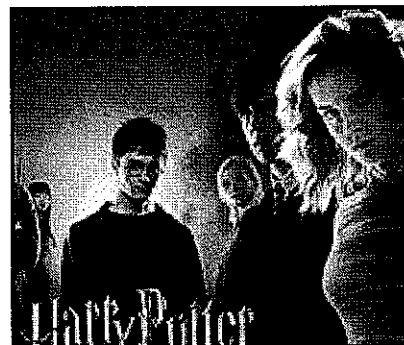


April 2007: The New York Times published this digitally altered photograph. In a correction, the Times' editor said "The wood siding at the far left of the building was out of alignment because the picture was retouched by a Times staff member who took the picture, but who is not a staff photographer. He altered it because a flash created a white spot on the picture when he shot it through the window of a train. Also, the retouching tool left a round circle on the building's window at the right". The Editor's note concludes

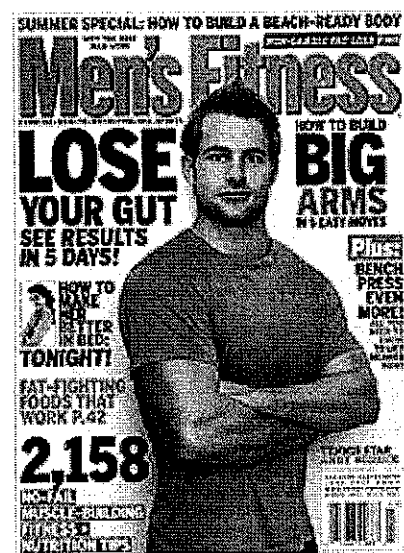


with "Times policy forbids the manipulation of any photograph. Had editors been aware of the manipulation and seen the original picture, they would have either published the picture with the blemish or not used it."

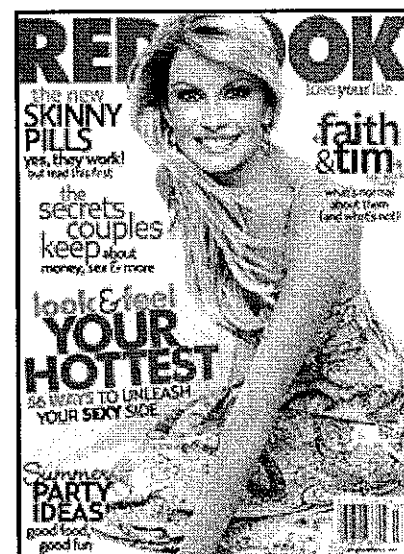
May 2007: In an advertisement for IMAX 3D theaters promoting the latest Harry Potter movie, the bust of actress Emma Watson was digitally enlarged. A similar advertisement in regular theaters was unaltered. Warner Brothers Pictures released a statement that said "This is not an official poster. Unfortunately this image was accidentally posted on the IMAX website. The mistake was promptly rectified and the image taken down."



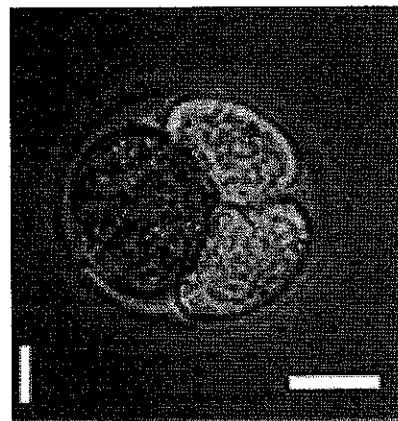
May 2007: The biceps of tennis player Andy Roddick were conspicuously enlarged on the cover of Men's Fitness magazine. Roddick commented that he was "pretty sure I'm not as fit as the Men's Fitness cover suggests". He also noted that a prominent birthmark on his right arm had been erased. Richard Valvo, a spokesman for Men's Fitness, said, "We wouldn't comment on any type of production issue." Adding, "I don't see what the big issue is here."



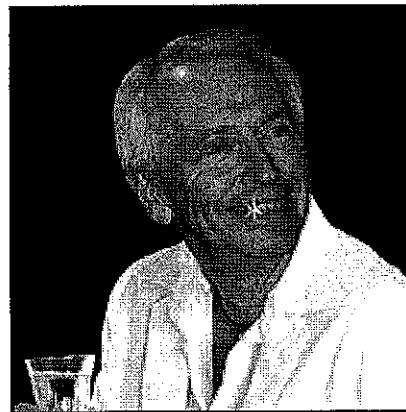
July 2007: This cover of Redbook magazine shows a heavily re-touched (and thinner) image of singer and actress Faith Hill. Redbook was accused of contributing to the unattainable body image created by digital re-touching. In response, Redbook's editor in chief Stacy Morrison said, "The retouching we did on Faith Hill's photo for the July cover of Redbook is completely in line with industry standards."



July 2007: Missouri University professor R. Michael Roberts and co-authors retracted their paper (Cdx2 Gene Expression and Trophectoderm Lineage Specification in Mouse Embryos) published in *Science* after an investigation revealed that accompanying images were doctored. Contrary to conventional wisdom, the published research presented evidence that the first two cells of mouse embryos possess markers that indicate from a very early stage whether they will grow into a fetus or placenta. An investigating university committee found that lead author and post-doctoral researcher Kaushik Deb deliberately altered images of the embryos. Deb abruptly resigned his position and moved with no forwarding address or explanation. The committee said Roberts was cleared of wrongdoing by the committee, but that there was some concern over "whether he had acted appropriately at all times" during the research period. "Since he addressed that in the letter he sent to *Science*, we had no reason to suspect anything other than that he had been tricked."



August 2007: The Kentucky state Republican Party distributed campaign flyers that depict Steve Beshear, the Democratic nominee for Governor, as a high-roller leaning on a casino table. "Don't gamble on Steve Beshear and his fool's gold casino plan," says the campaign material. State Republican party chairman Steve Robertson said the photo is of Beshear's head but someone else's body. "It is a humorous way to communicate the message", Robertson said.



August 2007: The French Magazine *Paris Match* altered this photograph of French President Nicolas Sarkozy by removing some body fat. The magazine said it had tried adjusting the lighting on the picture. "The correction was exaggerated during the printing process," the magazine said.



September 2007: British Culture Secretary James Purnell (far right) was digitally inserted into this photo at the opening of Tameside hospital in Lancashire. Purnell arrived late to the opening and the hospital asked if it could add his image to their record of the event. The hospital said in a statement: "As we would not be able to stage a repeat of this historic day for the hospital, we decided to take a photograph of Mr Purnell in the same spot very shortly after and merge it with the earlier photograph, to which Mr. Purnell kindly consented." A Purnell spokeswoman denied that he agreed to the picture being doctored. "He was assured they would show the three MPs in one picture and have him separately in the corner."



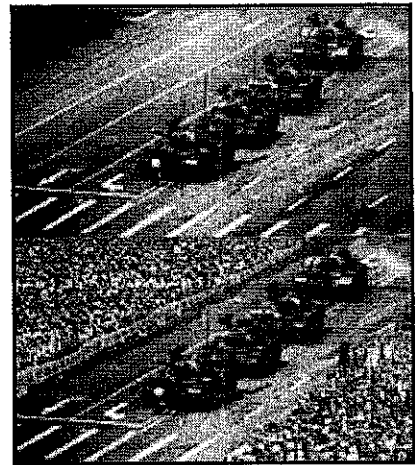
September 2007: Mikhail Delyagin was (mostly) digitally removed from a video after he made remarks critical of Russian Prime Minister Vladimir Putin. Shown here is a still frame from video of the television show "The People Want to Know". Only part of Delyagin was completely removed -- his leg and hand remain visible to the right of the man holding the microphone.



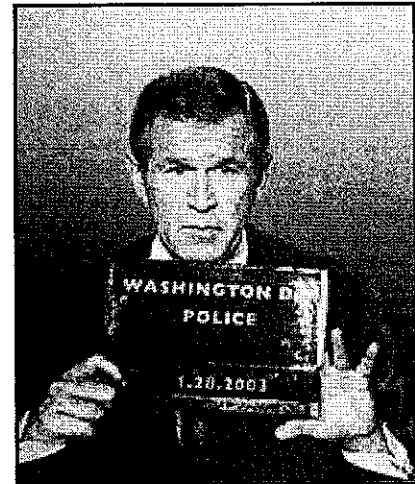
November 2007: Zhou Zhenglong from Shaanxi China claimed to have taken 71 photographs of the almost extinct South China tiger. Shown here is one image that was released to the public. Shortly after its release, it was determined that this image was a fake -- the most likely scenario is that the photograph is that of a life-size poster. This animation shows that the poster and photograph are nearly identical.



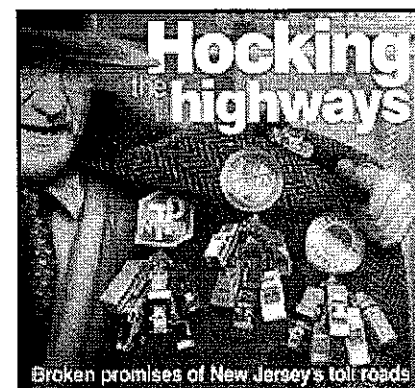
November 2007: A study by Dario Sacchi, Franca Agnoli and Elizabeth Loftus, published in the journal *Applied Cognitive Psychology*, shows that people's memories of events can be altered by viewing doctored images. For example, when presented with doctored images of the 1989 Tiananmen Square protest participants recalled the event as larger and more violent (shown in the lower panel is the doctored image in which the crowd was added).



November 2007: Artists Nora Ligorano and Marshall Reese created the exhibit "Line Up" depicting doctored photographs of George W. Bush and members of his administration. The exhibit, being shown at the New York City Public Library, is critical of the war in Iraq. "It is simply inappropriate to have political attack art, in the form of egregious doctored photographs of the President and other high-ranking officials who have dedicated their lives to public service, in a taxpayer-funded building frequented by schoolchildren and the general public," said Matthew Walter, director of communications for the state GOP. In response, Roberta Waddell, curator of the library's print collection, said the exhibit was in keeping with a historical tradition, calling the exhibit a relevant example of political commentary.



December 2007: The *Asbury Park Press* published this doctored photo of New Jersey Governor Jon Corzine as part of a story critical of Corzine's financial restructuring plans. In a letter to the *Press*, Corzine's chief of staff, wrote, in part, "Images that are nothing more than editorial cartoons morphed into photographs are fine -- for the editorial page. But placement of such images on the front page of the Sunday edition demonstrates a disregard for objective reporting." The *Press's* executive editor said that the photo did not blur the line between news reporting and editorial commentary. "That wasn't what we were trying to do," he said. "We were just trying to

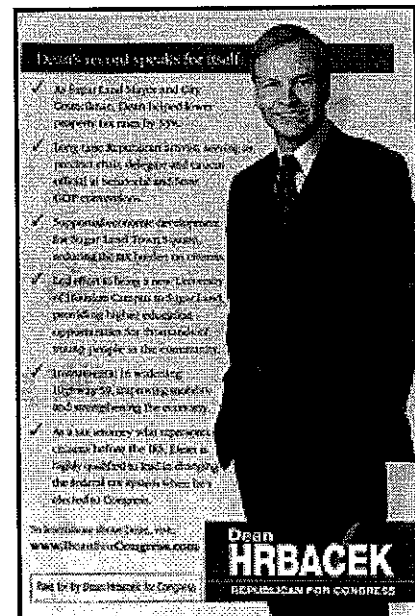


frame the story for readers. We were doing it in a way that was a little edgy, and in a way that would grab your attention."

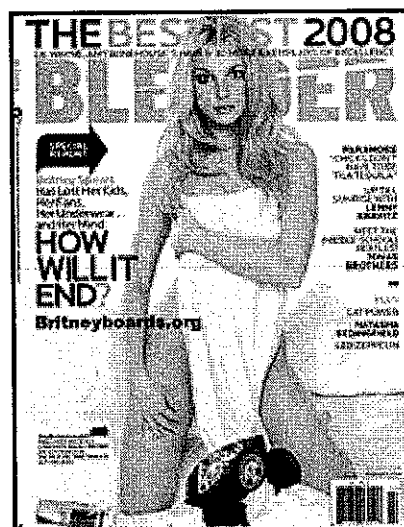
January 2008: Taiwan's newspaper *Liberty Times* published this doctored photo of a delegation, led by the chairman of the Franz Collection, being met by the Pope. In the original photo, Wang Shaw-lan, a publisher of competing newspaper *United Daily News*, was removed. A *Liberty Times* reporter said that she removed Wang whom she said was "not an essential presence" and in order to shrink the picture for "better display". Later, *Liberty Times* said that the doctored picture came from the Franz Collection, but a Franz Collection spokesman said the newspaper had asked it to airbrush out Wang.



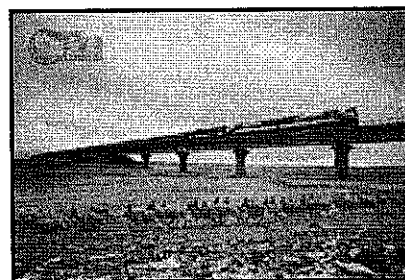
January 2008: This brochure of Texas Republican Congressional candidate Dean Hrbacek was mailed to voters. The photograph is a composite of Hrbacek's head and another person's (slimmer) body. Campaign manager Scott Broschart acknowledged that the image is a composite. Hrbacek has been so busy that he had no time to pose for a full-length photo for the mailing, Broschart said. "He may appreciate that we took a few pounds off him," Broschart said. "I think the voters ... are more concerned with the issues as opposed to pretty photo shoots."



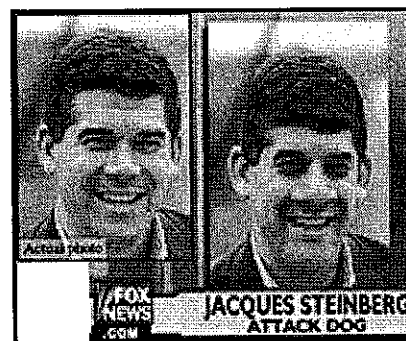
January 2008: This magazine cover featuring pop star Britney Spears is a composite of her head and a model's body. The magazine cover states "**Truthiness Alert:** This cover image is a composite photo. Britney did not pose for this picture. That, sadly, is not her body."



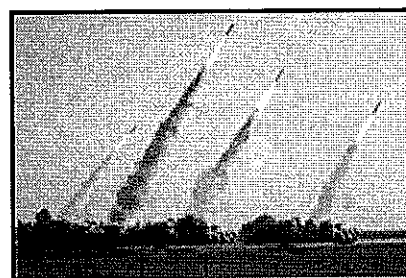
February 2008: This photograph, by Liu Weiqiang of the Daqing Evening News, won an award for "one of the ten most impressive news photos of 2006". This photograph was recently revealed to be a composite of two separate photographs: the antelopes and the train. Weiqiang says that he never published the picture as a news photograph. Weiqiang also wrote in his blog, "I admit it's unfaithful, as well as immoral for a photographer to present a fabricated picture. I'm truly sorry."



July 2008: In response to a New York Times story that suggested the FOX network's ratings might be slipping, the co-hosts of "Fox & Friends" broadcasted photos of Times reporter Jacques Steinberg and editor Steven Reddicliffe. The photos were doctored to make the journalist appear less attractive. A FOX spokeswoman said the executive in charge of "Fox and Friends" is on vacation and not available for comment but added that altering photos for humorous effect is a common practice on cable news stations.



July 2008: This image of an Iranian missile test appeared on the front page of many major newspapers. The image is from the web site of *Sepah News*, the media arm of Iran's Revolutionary Guards. After the publication of this photo, it was revealed that the second missile from the right was digitally added to the image in



order to conceal a missile on the ground that did not fire.

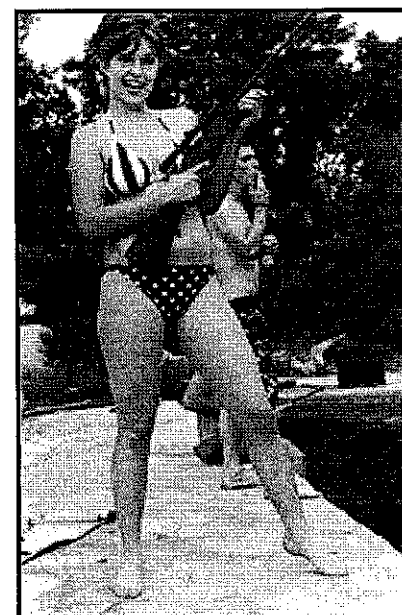
July 2008: This photo of Britain's Prince William appeared on the pages of *The Sun*. A person in the back of the boat was digitally removed from this photo (except for their knee). *The Metro* ran the unaltered photo, as did the on-line version of *The Sun*.



August 2008: Chris Myers, the Republican candidate for the U.S. House of Representatives, is criticizing his opponent, John Adler, and the Democratic Congressional Campaign Committee for a doctored photo that appeared on a campaign mailer produced by the DCCC. The mailer includes a photo that appears to show Myers walking with President George W. Bush. Myers said he has never met the President.



September 2008: This photo of Governor Sarah Palin was widely distributed across the Internet shortly after Palin was announced as the vice presidential nominee for the Republican ticket. Shortly after its release the photo was revealed to be a composite of Palin's head, and somebody else's body.



September 2008: After publishing photos of two deceased United States soldiers, the Associated Press retracted the photos after learning that one

of the photos was digitally altered. Shown here are the photos, where the photo on the left is a composite of this soldier's head and the body of the soldier on the right. The photos were released by the U.S. Army at Fort Stewart in Georgia.



November 2008: This cover of Time Magazine shows an electronic voting machine with an incongruous shadow that was digitally inserted into the photo (notice that the shadow from the two front legs emerge directly from underneath the legs, while the shadow for the wide back leg is floating between the front and back legs).



October 2008: This front-page photo of Justice Minister Rachida Dati appeared in the French newspaper Le Figaro in June of 2008. A large diamond ring on Dati's hand was digitally removed. This photo editing caused controversy regarding the alleged influence that the Sarkozy administration wields over the French press. The head of Le Figaro's photo department defended the editorial decision saying that the newspaper did not want to distract readers from the content of its interview with Dati.



February 2009: This photo of Heath Ledger and Christopher Nolan of "The Dark Knight" appeared in Vanity Fair as part of a series of photographs of acclaimed actors and directors. The photo of Ledger, who died in 2008, is from 2005 as he was promoting the film "Brokeback Mountain". Nolan (shown on the left) was digitally inserted into this photo.



March 2009: A ceremony on March 7th in Taiwan

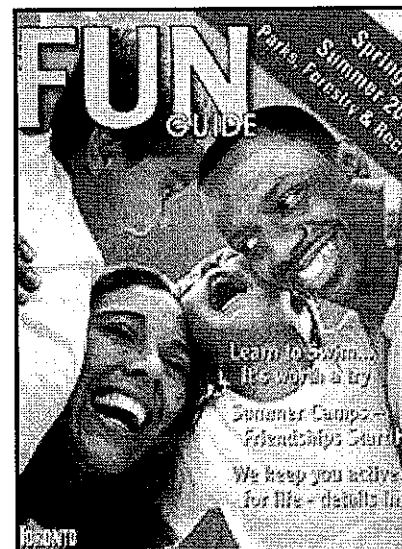
was held to honor Chinese soldiers who died in Papua, New Guinea during World War II. This photo shows a "spirit tablet" used as part of the ceremony. When the photo appeared on Sina, a Chinese website, the text which read "The army of Republic of China" was digitally removed. In Taiwan, the government uses the phrase The Republic of China, while the Chinese government uses the phrase The People's Republic of China.



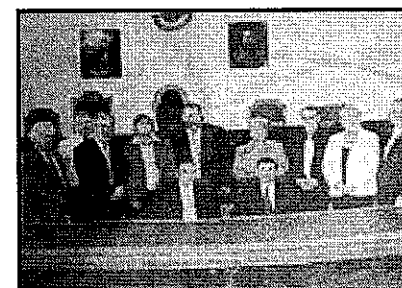
April 2009: This photo shows Prime Minister Benjamin Netanyahu (center left), President Shimon Peres (center right), along with members of the Cabinet. The Israeli newspaper Yated Neeman digitally removed two female Cabinet members from the photo and replaced them with male members. The newspaper Yated Neeman is considered to be ultra-orthodox and not supportive of females in the cabinet.



June 2009: This cover of Toronto's summer edition of *Fun Guide* was digitally altered to be more inclusive, keeping with an editorial policy to reflect diversity. "He superimposed the African-Canadian person onto the family cluster in the original photo," said communications director John Gosgnach. The original image was of a family of indeterminate ethnic background. "When you're publishing something with the deadlines and you don't have the right photo, the objective is to communicate the service," Mr. Sack, director of strategic communications, said.

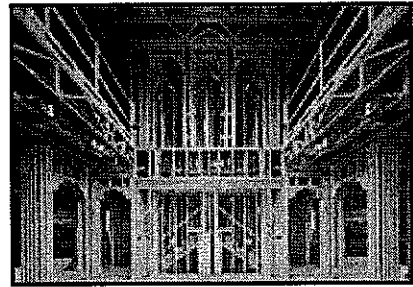


June 2009: This photo of a group of members of the Scottish National Party (SNP) appeared in a SNP newsletter. The two photos in the background of Scottish legends William Wallace and Robert the Bruce were digitally inserted, replacing royal portraits of the Queen and the Duke of Edinburgh. Local SNP councillor Cecil Meiklejohn blamed an "overly enthusiastic" local party member for removing the royal portraits.



July 2009: A picture essay in *The New York Times*

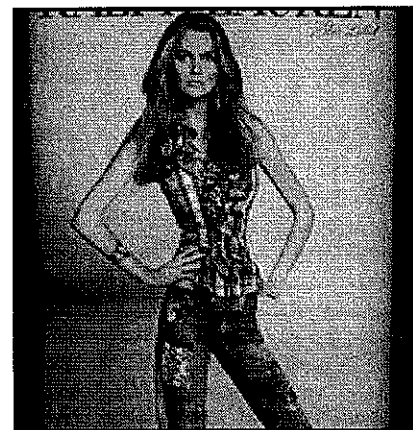
Sunday Magazine entitled "Ruins of the Second Gilded Age", by Edgar Martins, showed large housing construction projects that were halted due to the housing market collapse. The introduction said that the photographer "creates his images with long exposures but without digital manipulation." After discovering the photo manipulations, the *Times* posted the following on their website. "After a reader discovered that the photos were digitally altered, Editors later confronted the photographer and determined that most of the images did not wholly reflect the reality they purported to show. Had the editors known that the photographs had been digitally manipulated, they would not have published the picture essay, which has been removed from NYTimes.com."



August 2009: This photo from the web site of Microsoft's Polish subsidiary was doctored to change the race of one of the people. The original photo appeared on Microsoft's U.S. web site. "We are looking into the details of this situation. We apologize and are in the process of pulling down the image", said a Microsoft representative. The doctored photo on the Polish was removed and replaced with the original photo.



September 2009: This magazine advertisement by Ralph Lauren depicts a heavily manipulated photo of model Filippa Hamilton. After numerous reports citing this latest example of extreme photo manipulation, a Ralph Lauren representative admitted to "poor imaging and retouching", and added, "we have learned that we are responsible for the poor imaging and retouching that resulted in a very distorted image of a woman's body. We have addressed the problem and going forward will take every precaution to ensure that the calibre of our artwork represents our brand appropriately."



December 2009: A magazine ad for an Olay beauty product featuring the model Twiggy has been banned in the United Kingdom by the Advertising Standards Authority (ASA). "Olay is my secret to brighter-looking eyes," read the ad, "... reduces the look of wrinkles and dark circles for brighter, younger-looking eyes," the ad

continued. In its ruling, the ASA said that it considered that the post-production retouching of the original ad, specifically in the eye area, could give consumers a "misleading impression of the effect the product could achieve". An Olay spokesperson said the "minor retouching" had been inconsistent with its policies and it had already replaced the image with one with "no postproduction work in the eye area".



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